

REMARKS

In response to the Patent Office Action of June 4, 2003, the applicant respectfully requests re-examination and re-consideration. To further the prosecution of this application, amendments have been made herein. Moreover, additional claims have been added to this application in order to provide the applicant with the proper and complete scope of claim coverage. All amended claims, as well as added claims are believed to clearly patentably distinguish over the cited and referenced prior art.

Originally submitted claims 1-31 stand rejected by the Examiner. Claim 32 is withdrawn. Claims 33 - 61 stand as the newly added claims.

In the Patent Office letter the examiner has objected to claim 1 and the word "hard". Appropriate amendment has been made in claim 1.

In the Patent Office letter the examiner has objected to the specification, particularly the use of the term -- VELCRO --. Appropriate amendment has been made in the specification. Also, the Examiner has rejected claim 8 under 35 USC 112 for the use of the term -- Velcro --. Appropriate amendment has also been made in claim 8 to overcome this rejection.

In the Patent Office letter the examiner has set forth a rejection of claims 1-6, 13-14, and 19-31 under 35 USC 102(b) in view of the patent to Mizuno et al 5,876,325. The applicant respectfully traverses this rejection. The following amendments and arguments should make it clear that these rejected claims are now clearly in condition for allowance. The Examiner has relied upon embodiments disclosed in Figs. 52, 53, 60 and 62 of the Mizuno et al patent. The Examiner has further argued that this patent shows an arm assembly 519 having a hand assembly 656. The arm assembly 519, however, is not at all associated with the hand assembly 656. The arm assembly 519 is part of the slave station and not the claimed master station. Accordingly this position is in error.

Moreover original claim 1 has been further amended. Claim 1 now defines that, not only does the arm assembly include an elongated arm member, but also that the assemblies are disposed to the side of the operator so that the arm member extends in a direction along at least a portion of the operator's arm. The Mizuno et al. patent does not use a master unit that has a base

that is disposed remote from the slave station and to the side of the operator so that the arm member extends along at least a portion of the operator's arm. In Mizuno et al. in Fig. 62 the entire arm structure including the base is directly in front of the operator, as the operator would have to be positioned to the right and facing left in Fig. 62. Even in other embodiments described in the Mizuno et al. patent none of them have a master station remote from a slave station and in which the control mechanism is to the side of the operator so that the arm member extends in a direction along at least a portion of the operator's arm.

This placement as claimed in claim 1 enables improved operation of the master structure by enabling the operator's arm to extend in the direction of the arm member, thus providing enhanced master control. More precise master control occurs by having the operator's arm positioned along the arm member. Refer also to the drawings of the present application and, in particular, Figs. 1 and 3 where the placement of the operator's arm relative to the master arm member clearly illustrates this feature. Accordingly, claim 1 and its related dependent claims 2-6, 13, 14 and 19-27 should all now be in condition for allowance.

In the Patent Office letter the Examiner has indicated that claims 7-12 and 15-18 are allowable. Accordingly, by this amendment claims 7 and 15 have now been placed in independent form containing the subject matter of all intervening claims. This clearly places all of claims 7-12 and 15-18 in condition for allowance.

In the Patent Office letter the Examiner has also rejected claim 28 on the basis of the Mizuno et al. patent. However, claim 28 has been amended to recite that the bases are remote from the slave station, and that the pair of bases are disposed, respectively, on opposite sides of the operator so as to, in operation, position the respective elongated arms adjacent to and alongside of a substantial length of the operators arm. Mizuno et al. does not show this. Accordingly, claim 28 and its related dependent claims 29 and 30 should be found in condition for allowance.

In the Patent Office letter the Examiner has also rejected claim 31 on the basis of the Mizuno et al. patent. However, claim 31 is believed to be in condition for allowance. Claim 31 recites that the hand assembly includes a guide shaft adapted to be grasped by the surgeon for controlling replicated motion at the slave station, an actuator button or switch on said guide shaft controlled by the surgeon and for control of one or more functions of the system, and a multiple

rotation joint connecting said guide shaft to said arm assembly. These elements are not at all shown in the Mizuno et al. patent. The Examiner has not even advanced any argument or rejection specifically directed to claim 31, and the specific elements set forth therein.

Accordingly claim 31 should be found in condition for allowance.

Claim 32 has been withdrawn from consideration at this time.

Regarding newly added independent claim 33, this claim, as well as its related dependent claims should be found allowable as this claim sets forth substantially the same claim subject matter as found in claim 15, which was indicated by the Examiner as containing allowable subject matter. Refer to the last paragraph of new claim 33.

Regarding newly added claim 37, this claim is believed to be clearly patentably distinguishing over the cited prior art for reasons previously stated. The Mizuno et al. patent does not use a master unit that is remote from the instrument and has a base that is disposed to the side of the operator so that the arm member extends along at least a portion of the operator's arm. In Mizuno et al. the entire arm structure including the base is directly in front of the operator, as the operator would have to be positioned to the right and facing left in Fig. 62. This placement in claim 37 enables improved operation of the master structure by enabling the operator's arm to extend in the direction of the arm member, thus providing enhanced master control. The applicant has found that better master control is possible by this alongside positioning. Accordingly, claim 37 and its related dependent claims 38-39 should now all be found in condition for allowance.

Regarding newly added independent claim 40, this claim is also believed to be clearly patentably distinguishing over the cited prior art. The Mizuno et al. patent uses essentially a single joint formed by the intersection of the axes 650, 651 and 652. The master structure of the present invention on the other hand employs multiple axes, as claimed. This enables improved master operation and control by better physically matching the operator's arm and hand to the master control mechanism. Accordingly, claim 40 and its related dependent claims 41-47 should now all be found in condition for allowance.

Regarding newly added independent claim 48, this claim is also believed to be clearly patentably distinguishing over the cited prior art. The Mizuno et al patent does not teach a method as recited herein where, inter alia, the method includes disposing the base of the master

controller away from the patient support member, and laterally to the side of an assumed operative position of the medical practitioner; and having the hand of the medical practitioner grasp the hand piece while the elongated arm member extends in a direction that is substantially parallel to and alongside of the arm of the medical practitioner. Accordingly, claim 48 and its related dependent claims 49-51 should now all be found in condition for allowance.

Regarding the newly added independent claim 52, this claim has been added to cover another novel feature of the present invention. This is the common attachment of the master bases to the support for the operator of the system. This is illustrated in Fig. 1 by the common support brace 40. With this arrangement the operator can move or swivel without affecting the operator's relationship with the master controls. Claim 52 and its related dependent claims 53-61 should now all be found in condition for allowance.

Information Disclosure Statement

An Information Disclosure Statement (IDS) is being filed concurrently herewith. Entry of the IDS is respectfully requested. Applicants respectfully request acknowledgment of the Information Disclosure Statement mailed on March 13, 2002.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in conditions for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned at (978) 341-0036.

Respectfully submitted,
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